LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for isolating a macromolecule, comprising:

partially melting an inner wall of a test tube;

contacting ~~coating~~ the partially melted inner wall of the test tube with a plurality of beads after partially melting the inner wall of the test tube;

coating the beads with a capture reagent of the macromolecule; and

incubating the coated beads with a solution containing the macromolecule under conditions to allow binding of the macromolecule to the capture reagent, thereby isolating the macromolecule~~;~~

~~washing the coated beads with the bound macromolecule with a wash buffer to remove unbound material while maintaining binding of the macromolecule to the capture reagent; and~~

~~eluting the macromolecule from the capture reagent~~.

2. (Original) The method of claim 1, wherein the beads are glass microbeads.

3. (Original) The method of claim 1, where in the beads are polymer microbeads.

4. (Original) The method of claim 3, wherein the microbeads are agarose.

5. (Previously presented) The method of claim 1, wherein the capture reagent is attached to the beads by at least one linker molecule.

6. (Currently Amended) The method of claim 5 ~~claim 1~~, wherein the linker molecule is aminopropyltriethyoxysilane.

7. (Currently Amended) The method of claim 5 ~~claim 1~~, wherein the linker molecule is cyanogen bromide.

8. (Original) The method of claim 5, wherein in the linker molecule is a chemical cross-linking agent.

9. (Original) The method of claim 8, wherein the cross-linking agent is dimethyl suberimidate.

10. (Original) The method of claim 5, wherein the linker molecule is an antibody.

11. (Original) The method of claim 5, wherein the linker molecule is protein A or protein G.

12. (Currently Amended) The method as in claim 38 ~~claim 1~~, wherein the wash buffer is removed by inversion of the tube.

13 - 25. (Canceled)

26. (Currently Amended) A method for isolating guanine nucleotide-binding proteins for determination of guanine nucleotide ratios comprising:

partially melting an inner wall of a test tube;

contacting ~~coating~~ the partially melted inner wall of the test tube with a plurality of glass beads wherein the beads have a surface after partially melting the inner wall of the test tube;

reacting the beads with an agent to modify the surface of the beads to provide a plurality of free amino groups;

reacting the free amino groups on the beads with a bifunctional amine cross-linker to provide a plurality of sites for binding a guanine nucleotide-binding protein binding partner; and

incubating the coated beads with a solution containing the guanine nucleotide-binding protein under conditions to allow binding of the guanine nucleotide-binding protein to the binding partner while inhibiting nucleotide hydrolysis or release, thereby isolating the guanine nucleotide-binding protein~~;~~

~~washing the coated beads with the bound guanine-nucleotide-binding protein with a wash buffer to remove unbound material while maintaining binding of the guanine-nucleotide binding protein to the binding partner and inhibiting nucleotide hydrolysis and release;~~

~~releasing the bound nucleotide from the guanine-nucleotide binding protein; and~~

~~determining the ratio of guanine nucleotides released from the guanine nucleotide-binding proteins~~.

27. (Currently Amended) A method comprising:

heating a plurality of beads to a temperature sufficient to partially melt an inner wall of a tube;

contacting the heated beads with the inner wall of the tube after heating the plurality of beads to the temperature sufficient to partially melt the inner wall of the tube;

coating the beads with a capture reagent of a macromolecule; and

incubating the coated beads with a solution containing the macromolecule under conditions to allow binding of the macromolecule to the capture reagent~~;~~

~~washing the coated beads with the bound macromolecule with a wash buffer to remove unbound material while maintaining binding of the macromolecule to the capture reagent; and~~

~~eluting the macromolecule from the capture reagent~~.

28. (Previously presented) The method of claim 1, wherein the inner wall of the tube is partially melted using a heat gun.

29. (Previously presented) The method of claim 1, wherein the inner wall of the tube is partially melted using infrared irradiation.

30. (Previously presented) The method of claim 1, wherein the inner wall of the tube is partially melted using a filament.

31. (Previously presented) The method of claim 1, wherein the tube is a microcentrifuge tube.

32. (Currently Amended) The method of claim 1, wherein the tube comprises a polymeric material, polypropylene, or polystyrene.

33. (Canceled)

34. (Canceled)

35. (Previously presented) The method of claim 1, wherein the macromolecule is a protein, peptide, nucleic acid, carbohydrate, or polymer.

36. (Canceled)

37. (Previously presented) The method of claim 1, wherein the macromolecule is a polynucleotide.

38. (New) The method of claim 1, further comprising washing the coated beads with the bound macromolecule with a wash buffer to remove unbound material while maintaining binding of the macromolecule to the capture reagent; and eluting the macromolecule from the capture reagent.

39. (New) The method of claim 26, further comprising washing the coated beads with the bound guanine nucleotide-binding protein with a wash buffer to remove unbound material while maintaining binding of the guanine-nucleotide binding protein to the binding partner and inhibiting nucleotide hydrolysis and release; releasing the bound nucleotide from the guanine-nucleotide binding protein; and determining the ratio of guanine nucleotides released from the guanine nucleotide-binding proteins.

40. (New) The method of claim 27, further comprising washing the coated beads with the bound macromolecule with a wash buffer to remove unbound material while

maintaining binding of the macromolecule to the capture reagent; and eluting the macromolecule from the capture reagent.